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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/765,965	01/19/2001	Debra Hensgen	OPTV-062/ORG/US	8232

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THE CHASE BUILDING  
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EXAMINER

SHANG, ANNAN Q

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/765,965

Applicant(s)

HENSGEN ET AL.

Examiner

Annan Q. Shang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed 03/03/06 have been fully considered but they are not persuasive.

With respect to claims 1-8, 10-16, 18-22, 25-36, 39-52 and 54 rejected under 102(e) as being anticipated by **O'Connor (6,480,667)**, and claims 9, 17, 23-24, 37-38 and 53 rejected under 103(a) as being unpatentable over O'Connor in view of **Abecassis (6,289,165)**, applicant argues discusses the disclosure of O'Connor and states that "the office action appears to equate 'pieces' of a program (e.g., frames) with multiple perspectives of the program..." "...the recited multiple perspectives and replay from a second perspective are not disclosed by O'Connor..." "...O'Connor does not disclose at least 'automatically determining a second point in time in the second perspective..."

In response, Examiner disagrees. Examiner notes applicant's arguments, however, O'Connor discloses plurality of perspectives. O'Connor teaches plurality of perspectives of the video as illustrated in figure 8 where 'X' is the first or current perspective (col.5, lines 28-53). Applicant should note that perspective is the interrelation in which a subject or its parts are mentally viewed or the capacity to view things in their true relations. In this instant several image frames are taken from the video stream at different times and a user is able to select one of the frames as a new starting point to which to begin an operation. Hence the 102(e) rejection of claims 1-8, 10-16, 18-22, 25-36, 39-52 and 54 as being anticipated by O'Connor and the 103(a)

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rejections of claims 9, 17, 23-24, 37-38 and 53 as being unpatentable over O'Connor in view of Abecassis, is proper, meets all the claimed limitations as repeated below. This office action is made final.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-9, 10-16, 18-22, 25-36, 39-52 and 54 are rejected under 35 U.S.C. 102(e) as being anticipated by **O'Connor (6,480,667)**.

As to claim 1, note the **O'Connor** discloses system and method for indexing between trick-play and normal play video streams in a video delivery system and further discloses a method for processing broadcasts, comprising:

Receiving a broadcast of a program (Video Record and Playback System 'VRPS' 100 receives broadcast video via VIDEO IN 102, fig.1 and col.2, lines 15), the broadcast containing a plurality of perspectives (different frames, segments, portions, etc., of the video, col.2, lines 5-26 and col.5, lines 28-47) of the program; VRPS records at least

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one of the plurality of perspectives in a storage device (Storage Units 'SU' 108 and 122, col.2, lines 38-44), note that SU-108 or 122 is coupled to Receiver or Video In 102;

Presenting a first perspective (first frame or I-frame, segment, etc.) of a plurality of perspective to the viewer (col.2, lines 31-37), the first perspective comprising a first perspective of a portion of the program (col.2, line 54-col.3, line 2); storing (Storage Unit 'SU' 108, col.2, lines 20-44) at least one of the pluralities of perspectives;

Providing input from the a viewer (via a remote control 'RC' col.4, lines 14-26 and line 65-col.5, line 26) which indicates a desire to replay the portion of the program (review a video clip the user just saw) from a second perspective (time shift frame, segment, portion, etc., of the video program) of the plurality of perspectives;

Identifying (Processor 130, col.2, lines 45-52) in the first perspective a first point in time in the program, which corresponds to the beginning of the portion, responsive to the input (col.4, lines 14-45);

Automatically (Processor 130, col.2, lines 45-52) determining a second point in time in the second perspective where the second point in time comprises an approximation of the first point in the program and presenting the portion of the program from the second perspective to the viewer, beginning at the second point in time (figs.5, 7, 8, col.2, lines 54-64, col.4, lines 14-64, line 65-col.5, line 1+ and col.5, lines 28-53), note that several image frames are taken from the video stream at different times and a user is able to select one of the frames as a new starting point to which to begin an operation.

As to claim 2, O'Connor further discloses where presenting the first perspective and storing are performed simultaneously (fig.3, col.3, lines 7-26 and col.4, lines 14-45).

As to claim 3, O'Connor further discloses where storing the at least one of the first perspective is performed automatically (fig.3, col.3, lines 7-26 and col.4, lines 14-45).

As to claims 4 and 5, O'Connor further discloses where presenting at least one of the plurality of perspectives includes presenting at least one of the stored perspectives and storing are performed simultaneously (fig.3, col.3, lines 7-26 and col.4, lines 14-45).

As to claim 6, O'Connor further discloses periodically storing meta-data corresponding to each of one or more of the received plurality of perspectives of the program, the meta-data comprising at least time and offset information for each of corresponding one or more plurality of perspectives (col.5, lines 28-47).

As to claim 7, O'Connor further discloses where receiving the broadcast includes receiving a plurality of related video streams, each stream including one of the perspectives (col.5, lines 28-47).

As to claim 8, O'Connor further discloses where identifying the first point in time in the first perspective comprises identifying a first offset (fig.4 and col.3, lines 49-57) in the stored file corresponding to the first perspective.

As to claim 10, O'Connor further discloses where storing at least one of the plurality of perspectives includes storing the perspectives in at least one circular buffer (col.2, lines 21-23 and col.3, lines 26-32).

As to claim 11, O'Connor further discloses where determining the second point in time in the second perspective comprises locating an offset in the second perspective which is near the first offset (fig.4 and col.3, lines 49-57).

As to claim 12, O'Connor further discloses where determining the second point in time in the second perspective comprises: searching stored meta-data to identify two consecutive offsets corresponding to the first perspective, such that the interval represented by the two consecutive offsets includes the first offset; utilizing a stored time corresponding to each of the two consecutive offsets to determine an approximated point in time; searching stored meta-data to identify two consecutive times corresponding to the second perspective, such that the interval represented by the two consecutive times includes the approximated point in time; utilizing a stored offset corresponding to each of the two consecutive times to determine an approximated offset and locating an offset in the second perspective which is near the approximated offset (fig.4, col.3, line 49-col.4, line 6 and line 37-col.5, line 1+).

As to claims 13-14, O'Connor further discloses where the plurality of perspectives of the program comprises MPEG data streams (col.2, lines 16-26), and where the offset in the second perspective, which is near the first offset corresponding to an MPEG I-frame and where the offset in the second perspective which is near the approximated offset corresponds to an MPEG I-frame (col.3, lines 49-57 and col.5, lines 28-63).

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As to claim 15, the claimed "a method for playing a multi-perspective program comprising..." is composed of the same structural elements that were discussed in the rejection of claim 1.

Claim 16 is met as previously discussed with respect to claim 6.

Claim 18 is met as previously discussed with respect to claim 11.

Claim 19 is met as previously discussed with respect to claim 12.

As to claim 20, the claimed "a system for recording a broadcast including a plurality of perspectives of the program comprising..." is composed of the same structural elements that were discussed in the rejection of claim 1.

Claim 21 is met as previously discussed with respect to claim 2.

As to claim 22, O'Connor further discloses where the recorded perspectives to the viewer without interrupting the recording of the broadcast (col.2, line 54-col.3, line 20).

As to claim 23-24, O'Connor further discloses where the receiver is a STB (col.2, lines 1-15), which receives television signal, via a camera, broadcast, cable, satellite signals, etc., and where the storage device 108 or 122 is contain within the STB or removable storage (col.2, lines 16-44).

Claim 25 is met as previously discussed with respect to claim 6.

As to claim 26, O'Connor further discloses where the storage device is selected from the group consisting of: a magnetic disk, an optical disk and a flash memory (col.2, lines 26-44).

Claim 27 is met as previously discussed with respect to claim 11.



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Claim 28 is met as previously discussed with respect to claim 12.

As to claim 29, O'Connor further discloses where the receiver comprises at least one tuner (col.2, lines 1-6).

As to claim 30, O'Connor further discloses where the receiver comprises a demultiplexer and a processor (col.2, lines 1-15).

As to claim 31, the claimed "a system for presenting broadcasts..." is composed of the same structural elements that were discussed in the rejection of claim 1.

Claim 32 is met as previously discussed with respect to claim 2.

Claim 33 is met as previously discussed with respect to claim 2.

Claim 34 is met as previously discussed with respect to claim 5.

Claim 35 is met as previously discussed with respect to claim 5.

Claim 36 is met as previously discussed with respect to claim 6.

As to claims 39-40, O'Connor further discloses where the receiver is configured to receive a plurality of audio and/or video streams associated with the plurality of perspectives and where the A/V streams includes one of the perspectives (col.2, lines 1-15 and col.5, lines 28-47).

Claim 41 is met as previously discussed with respect to claim 11.

Claim 42 is met as previously discussed with respect to claim 12.

As to claim 43, O'Connor further discloses where the storage device includes at least one circular buffer 106 for storing at least one of the plurality of perspectives (col.2, lines 21-23 and col.3, lines 21-32).

As to claim 44, O'Connor further discloses where the processor is configured to search at least one of the stored perspectives (col.2, lines 45-52)

As to claim 45, the claimed "a computer program product for processing broadcasts, comprising..." is composed of the same structural elements that were discussed in the rejection of claim 1.

Claim 46 is met as previously discussed with respect to claim 2.

Claim 47 is met as previously discussed with respect to claim 6.

Claim 48 is met as previously discussed with respect to claim 4.

Claim 49 is met as previously discussed with respect to claim 2.

Claim 50 is met as previously discussed with respect to claim 11.

Claim 51 is met as previously discussed with respect to claims 39-40.

Claim 52 is met as previously discussed with respect to claim 12.

Claim 54 is met as previously discussed with respect to claim 43.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9, 17, 23-24, 37-38 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over **O'Connor (6,480,667)** and further in view of **Abecassis (6,289,165)**.

As to claims 9, 17, 37-38 and 53, O'Connor teaches all the claimed limitation as previously discussed with respect to claims 1, 15, 36 and 45, but fails to explicitly teach where presenting the first perspective includes presenting the first perspective in one window of a display and presenting at least one of the plurality of perspectives includes presenting a second perspective from the plurality of stored perspectives in a different window.

However, note the **Abecassis** reference figures 1-2 and 15, discloses a system and method of playing interleaved presentation, where a multimedia player or STB permits a viewer to obtain multiple presentation of a video(s), multimedia and other services and customizes the playing of the stored video, playing the plurality of presentation of perspectives in multiple windows on a display device (col.6, lines 19-48, lines 58-67, col.13, lines 7-30, col.17, line 61-col.18, line 10 and col.59, line 27-col.60, line 1+).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Abecassis into the system of O'Connor to enable the user to simultaneously view different portions of the video on a display device.

As to claims 23-24, O'Connor further teaches a receiver, which receives video transmitted via camera, television signal, broadcast, cable, satellite, etc., decodes the video stream, stores and playback as desire via a Video out port connected to a monitor or TV screen or other display (col.2, lines 31-37 and col.5, lines 28-37), but silent to explicitly use a STB which includes a storage device.

However of Abecassis teaches various multimedia receiving or player devices including a STB with storage capabilities (col.6, lines 19-48).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Abecassis into the system of O'Connor to provide a STB connected to conventional TV sets, so that end users don't have to buy a new TV along with the computer elements.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Annan Q. Shang** whose telephone number is **571-272-7355**. The examiner can normally be reached on **700am-400pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Christopher S. Kelley** can be reached on **571-272-7331**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the **Electronic Business Center (EBC)** at **866-217-9197 (toll-free)**.



**Annan Q. Shang**



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